

RESULTS OF THE LATHROP CENTRAL AFRICAN REPUBLIC EXPEDITION 1976, ORNITHOLOGY¹

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ABSTRACT: Some 400 specimens of 94 species of birds were collected in the vicinity of the Ouossi River, in the southern, forested part of the Central African Republic, by the Lathrop Expedition in June 1976. Forty-three of these species are here recorded for the first time from that country. Others, known from there from one or a few earlier specimens, constitute sizeable extensions of previously known ranges. Aside from these distributional data, weights of all the birds are recorded as well as the gonadal condition of each specimen, information of a sort lacking until now for the birds of that portion of central Africa.

INTRODUCTION

This paper presents the results of the Lathrop Central African Republic Expedition in ornithology carried out in 1976. All the bird collecting was done from one base camp, near the Ouossi River, about 11 k west of Baroua, elevation 680 m, roughly 5°20' N-24°20' E. This is a forested area in the extreme southern part of what Chapin (1932:90) termed the Ubangi-Shari Savanna District in his map of the faunal areas of Africa. The collecting was done by Andrew Williams and his two African assistants and skinners, Julius Kyongo and Philip Imbayi, between 31 May and 22 June 1976. In his report to the museum, Williams wrote that the forests near the camp site proved to be of three separate types which he found had small differences in their bird life: 1) the mature riverine forest along the Ouossi River, with the largest trees of the three, and, for the most part, dense, lush undergrowth; 2) an area of mature, but more open forest away from the river north of the camp, somewhat drier, and with no little streams running through it; 3) a still more open type of woodland bordering on open grassland. The forests visited were fairly small and restricted and were some distance west of the larger supposedly isolated, lowland forest shown in Map B in Hall and Moreau's *Atlas of African Ornithology* (1970), but, judging from the birds obtained in them, they were similar to, but

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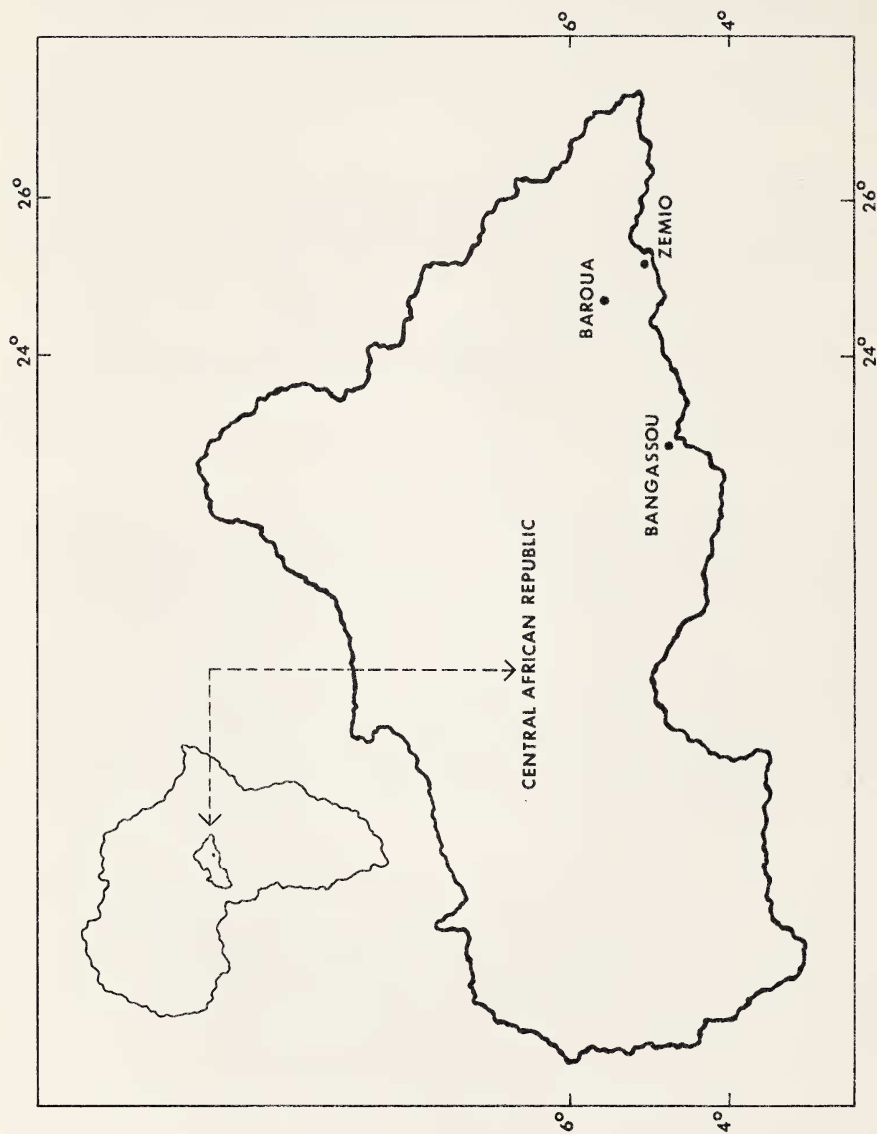


FIGURE 1. Map of Africa showing the Central Africa Republic and the locality of the present collection near Baroua.

somewhat less humid than the northern parts of the great Congo forest of Zaire to the south. During his collecting, involving both mist nets and shotgun, Williams became aware of the absence of starlings and of akalats (*Sheppardia*) in all three of these forested areas. It is not conclusive that these birds do not occur there, as at least 6 species of *Lamprotornis* and 1 of *Sheppardia* have been reported earlier from the Central African Republic, but they cannot be abundant near the Ouossi River, or they would have been noted.

A collection of 400 specimens of 94 species, made during a little over 3 weeks in the field, cannot be looked upon as a complete representation of a local, tropical forest bird fauna. However, it is significant in filling gaps in our knowledge of the distribution of central African birds. The collecting was confined almost wholly to the forested areas, but a few birds were taken in the open grasslands immediately adjacent to them. The collector carefully and conscientiously recorded in detail the colors of the soft parts (eye, bill, bare skin areas and feet), as well as the weight, the state of the gonads (unmeasured) and the contents of the stomach of every specimen. The weights and gonadal condition reported here are the first for their area. The colors of the soft parts and the stomach contents are included only for species of which Chapin (1932-1954) had little material, and only for some species of special interest has systematic discussion been thought useful.

In evaluating the extensions of known ranges of a large number of the included species, the maps of each of the passerines in Hall and Moreau's atlas are of the first importance. The maps in Mackworth-Praed and Grant's two volumes on the birds of west-central and western Africa show mere black swatches to indicate ranges, and these are not precise in the sense that are those of Hall and Moreau, which attempt to show every locality of record. In all such species maps, where the swatches suggest distributional limits beyond those given by Hall and Moreau, and where there are no published records in the earlier literature, I have assumed they were not based on actual specimens or on definite observations, and have been guided basically by the corresponding maps in Hall and Moreau. Assuming a period of three years from the completion to the publication of these maps, I have gone back to 1967 in my search of the literature for possible unmapped records from the Central African Republic.

Table 1 lists birds in the Lathrop Expedition's collection which are the first records in print for their species from the Central African Republic. A number of others fill sizeable gaps in the specimen records mapped by Hall and Moreau, but are not new for that political area.

The systematic order and the nomenclature used in this paper is that of Mackworth-Praed and Grant (1970-1973), the most recent complete work on the birds of western and central Africa. In a few species it has been deemed better not to follow their treatment. Further, the generic and specific names and sequence have been changed, where needed, to conform with the Reference List of the Birds of the World, by Morony, Bock and Farrand (1975).

TABLE 1

Species of birds hitherto unreported from the Central African Republic.

<i>Pachycoccyx audeberti</i>	<i>Erythropygia leucosticta collsi</i>
<i>Cuculus clamosus clamosus</i>	<i>Cossypha natalensis intensa</i>
<i>Cuculus clamosus gabonensis</i>	<i>Alethe diademata woosnami</i>
<i>Cercococcyx mechowii</i>	<i>Alethe poliocephala carruthersi</i>
<i>Alcedo leucogaster leopoldi</i>	<i>Trichastoma albipectus albipectus</i>
<i>Halcyon badia</i>	<i>Trichastoma rufipenne rufipenne</i>
<i>Halcyon malimbica malimbica</i>	<i>Ptyrticus turdinus</i>
<i>Tockus hartlaubi granti</i>	<i>Camaroptera superciliaris flavigularis</i>
<i>Pogoniulus scolopaceus flavisquamatus</i>	<i>Camaroptera chloronota toroensis</i>
<i>Pogoniulus bilineatus leucolaema</i>	<i>Macrosphenus flavicans hypochondriacus</i>
<i>Pogoniulus subsulphureus flavimentum</i>	<i>Platysteira castanea castanea</i>
<i>Pogoniulus atroflavus</i>	<i>Trochocercus nigromitratus</i>
<i>Trachyphonus purpuratus purpuratus</i>	<i>Anthreptes rectirostris tephrolaema</i>
<i>Melignomon zenkeri</i>	<i>Nectarinia seimundi traylori</i>
<i>Indicator maculatus stictithorax</i>	<i>Nectarinia cyanolaema octaviae</i>
<i>Indicator exilis exilis</i>	<i>Nigrita bicolor brunnescens</i>
<i>Melichneutes robustus</i>	<i>Nigrita canicapilla canicapilla</i>
<i>Campethera nivosa herberti</i>	<i>Mandingoa nitidula schlegeli</i>
<i>Smithornis capensis camarunensis</i>	<i>Spermophaga ruficapilla ruficapilla</i>
<i>Pitta angolensis longipennis</i>	<i>Malimbus nitens microrhynchus</i>
<i>Pycnonotus gracilirostris chagwensis</i>	<i>Dicrurus atripennis</i>
<i>Baeopogon indicator indicator</i>	

SPECIES ACCOUNTS

Species here reported for the first time from the Central African Republic are marked with an asterisk.

FAMILY ACCIPITRIDAE

Accipiter tachiro canescens (Chapin). — Two adult males and one young, but fully grown female of this hawk were collected 2, 13 and 16 June. The subspecies must be commoner in the Ouossi River area than might have been expected, as it has been a seldom collected bird in most parts of its range. The female was in worn plumage with a few adult feathers coming in on the upper wing coverts, and also had a very few pale chestnut feathers showing on the sides of the otherwise white breast and abdomen. The two males weighed 194 and 205 g, the female 325 g; both adults had enlarged gonads. One of the specimens was taken in swampy riverine forest; one in open forest undergrowth, and one in dense undergrowth of mature forest.

FAMILY COLUMBIDAE

Turtur tympanistria tympanistria (Temminck and Knip). — One male, testes enlarged, 5 June, weight 67 g.

Turtur brehmeri brehmeri (Hartlaub). — The Blue-headed Dove must be fairly common in the dense forest around the Ouossi River as 4 examples were obtained on four different days, 1, 2, 10 and 16 June. Two of them had enlarged gonads, the other two had small, inactive ones; 1 male weighed 120 g; the 3 females 105, 107 and 130 g respectively.

FAMILY CUCULIDAE

Clamator levaillantii Swainson. — This crested cuckoo is not a bird of the true forest, but does come into the margins of such areas. One adult male was captured in a mist net in the undergrowth of mature forest 8 June; testes somewhat enlarged; weight 110 g.

**Pachycoccyx audeberti* (Schlegel). — Because of the still limited number of records of this scarce cuckoo, it may be noted that Andrew Williams saw, but was unable to collect, one just outside the forest.

Cuculus solitarius solitarius Stephens. — One adult male, testes not enlarged, was taken in open forest, bordering grassland, 7 June; weight 83 g.

**Cuculus clamosus gabonensis* Lafresnaye. — One adult female, ovary enlarged, was taken in open forest 8 June; weight 78 g. This specimen, together with one of *C. solitarius*, collected the day before, raise again the old doubts as to the nature of the relationship of the two species. Furthermore, Williams wrote that he also saw, but did not obtain, one pure black *clamosus*. Were it not for the fact that in their vocalisms, the coloration of their egg shells, and their different choice of hosts, *clamosus* and *solitarius*, at least in southern and eastern Africa, are quite distinct, one might be tempted to regard them as variables within a single broadly phenotypic species. This is, however, negated by these considerations and the only possible conclusion is that the two species may have had a common origin in the forested regions of central Africa where the persistent, present population still reveals the phenotypic spectrum of the ancestral stock (including such variables as *jacksoni*, *gabonensis* and *mabirae*). It is known to occur, not far to the south, in the forests of Zaïre. The all black individual seen by Williams must have been *C. clamosus clamosus* of southern Africa, a race known to migrate north after the southern breeding season to the Congo forests and even as far north as southern Ethiopia. It too, is a first record for the Central African Republic.

**Cercococcyx mechowi* Cabanis. — The Dusky Long-tailed Cuckoo is generally thought of as an uncommon, or, at least, elusive bird, “. . . more easily heard than seen” (Mackworth-Praed and Grant, 1970:369), of the central African forests, but it must be anything but scarce in the Ouossi River area, as five examples, all females, were obtained there, 1, 10, 12 and 17 June. One of these was an immature bird, the others were adult; some were shot from as high as 40

feet up in trees while others were taken in mist nets set in the undergrowth. The weights of the adults were 54, 55, 59 and 61 g; the young bird 61 g. One bird had the ovary enlarged; the others had small ovaries.

FAMILY CAPRIMULGIDAE

Scotornis climacurus sclateri Bates. — One adult male, testes enlarged, 5 June, weight 44 g, taken in open country near the forest edge.

FAMILY TROGONIDAE

Apaloderma narina brachyurum Chapin. — One adult male, testes slightly enlarged, weight 63 g, 10 June, was collected in mature riverine forest with open undergrowth.

FAMILY ALCEDINIDAE

Alcedo quadribrachys guentheri Sharpe. — Four specimens, 10 to 18 June, were taken in mist nets over a small stream in riverine forest; all had small, inactive gonads; 2 males weighed 33 and 36 g, 2 females 32 g each.

**Alcedo leucogaster leopoldi* (Dubois). — Between 6 and 16 June, 4 males and 3 females were taken in mist nets set in swampy riverine forest. The birds had gonads ranging from not enlarged to slightly so; weights were 12, 12, 12 and 14.5 g for the males; 14, 14 and 16 for the females. The present specimens agree in coloration and in size with a series from western Uganda, but show less diversity in the purplish or greenish-blue bars on the coronal feathers. In the birds from two forests in Uganda, the Bwamba in extreme western Uganda, and the Malabigambo near the western shore of Lake Victoria, it was found (Friedmann 1969:4) that there were almost two color phases in this character and that there were no intermediates. This is not the case with the Ouossi River birds, some of which actually have both purplish and greenish-blue bars on different feathers.

Myioceyx lecontei (Cassin). — Between 6 and 15 June, 6 specimens of the Dwarf Kingfisher were netted in dense riverine forest undergrowth. None were in breeding condition; weights 10 to 10.5 g (4 males), 10 and 12 g (2 females). Comparison of these specimens with a long series in the Los Angeles County Museum from western Uganda, including a number from the Budongo Forest (type locality of van Someren's proposed race *M. l. ugandae*) show no differences in dimensions or in coloration. The small blue coronal spots that were the basis of *ugandae* are by no means constant in Uganda birds, and are present in 2 of our 5 adults from Ouossi River. I conclude that this species has no recognizable races.

Ispidina picta picta (Boddaert). — The Pigmy Kingfisher is represented by 2 males and 1 female taken 16 and 19 June in mist nets set in swampy riverine forest; all in non-breeding state, or, at most, with slight gonadal enlargement; weights 12 and 12.5 g (males); 11 g (female).

**Halcyon badia* Verreaux. — One female, ovary not enlarged, was netted in the forest undergrowth 18 June. Comparison with a dozen west Uganda specimens in the Los Angeles County Museum, including a series of topotypes of *budongoensis* from the Budongo Forest, shows no reason for recognizing that subspecies. It is sufficient to note a general clinal increase in size toward the eastern parts of the range of the species. Our specimen weighed 47 g. This specimen was caught in mist nets which suggest that Mackworth-Praed and Grant (1970:431) were in error when they wrote that this species usually "... keeps twenty or thirty feet from the ground."

**Halcyon malimbica malimbica* (Shaw). — Four specimens, 2 of each sex were taken (3 in mist nets) in the riverine forest undergrowth, 1 to 15 June, all with slightly enlarged gonads; weights 83 and 90 g (males); 83 (both females).

FAMILY BUCEROTIDAE

**Tockus hartlaubi granti* (Hartert). — A breeding male, one of two birds seen about 60 feet up in a tree, catching insects on the wing, was taken 3 June in lush forest; weight 135 g. This specimen agrees in coloration with another male in the Los Angeles County Museum from Bwamba Forest, western Uganda, but has a much longer bill (culmen to base 74 mm; 63 in the Bwamba bird). There is some difference in the wing and tail lengths of the two, but the Uganda bird is in very abraded plumage, especially in its remiges and rectrices, which naturally affects its dimensions.

FAMILY CAPITONIDAE

**Pogoniulus scolopaceus flavisquamatus* (Verreaux). — One female, ovary not enlarged, weight 13 g, was netted in dense undergrowth in degraded forest, 5 June.

Pogoniulus chrysoconus chrysoconus (Temminck). — Three male examples of the Yellow-fronted Tinker-bird were collected, 17 and 19 June, in mist nets set at a fruiting tree at the forest edge; weights 10, 11 and 11.5 g; one of them had large testes, the others small ones. They agree in size and coloration with other specimens in the Los Angeles County Museum from the Ivory Coast, Uganda and western Kenya.

**Pogoniulus bilineatus leucolaema* (Verreaux). — Four males, 2 with large, 2 with small gonads, were collected 8 to 18 June in the forest edge; weights 10.5 to 12 g (average 11.1). These specimens are slightly paler below than a long series of *P. b. mfumbiri*, less yellowish below than *P. b. sharpei* from the Ivory Coast.

**Pogoniulus subsulphureus flavimentum* (Verreaux). — The Yellow-throated Tinker-bird was common in the Ouossi River area, where 3 females in non-breeding state, and 2 males with enlarged testes, were collected 15 to 17 June; weights 9 and 10.5 g (males); 10 g (females). All were collected while feeding in fruiting forest trees. These specimens agree in size and coloration with a long series in the Los Angeles County Museum from western Uganda.

**Pogoniulus atroflavus* (Sparrman). — The Red-rumped Tinker-bird was found to be very common in the Ouossi River area, and some 13 specimens were collected 12 to 19 June; 6 males, 7 females, gonads enlarged in 4 individuals, small in the others; weights 17 to 21.5 g (average 18.1) in males, 14 to 20 g (average 17.5) in females. Three of the birds were caught in mist nets, but the majority (10) were shot as they were feeding well up in fruiting trees.

**Trachyphonus purpuratus purpuratus* Verreaux. — The Yellow-billed Barbet was met with twice, 9 and 16 June, in the riverine forest; 1 male with slight testicular enlargement and 1 female with a small ovary; weights 87 g (male), 89 g (female). These examples are placed with the nominate race of the species, but it is not clear that *T. p. elgonensis* is constantly different. That eastern subspecies is said to have the whitish edges of the feathers of the throat and foreneck less well marked, but a very long series in the Los Angeles County Museum from the forests of western Uganda suggests that this character is one that appears as the feathers become abraded. Some of the Uganda birds have these edges as well developed as in our Ouossi birds, while others have no sign of them. Unfortunately, we have insufficient west African material for comparison, but it would seem that only specimens in fresh plumage of the two can be expected to demonstrate the racial difference. The distributional maps in Mackworth-Praed and Grant (1970:553) suggest that they had no records from the area we are concerned with in this report, but their range for *T. p. purpuratus* comes nearer to it than that of *T. p. elgonensis*. White (1965:271) writes that the nominate race intergrades in the upper Congo with *elgonensis*, and it would seem that this is true as well in the Central African Republic.

FAMILY INDICATORIDAE

**Melignomon zenkeri* Reichenow. — One specimen of this rarely collected species was caught in a mist net 1 m above the ground in dense forest undergrowth by a small stream along the Ouossi River, 2 June; a female in breeding condition, the largest ovarian follicle 2.5 mm; bill dark horn brown, the lower base yellowish; iris dark brown; feet pale olivaceous yellow; eye skin dark gray; weight 24 g. The specimen agrees in coloration with another breeding female from Bwamba (Los Angeles County Museum #66898), extreme western Uganda (July 9), but is smaller, this being especially noticeable in the bill and tail. The Ouossi bird measures: wing 76, tail 47.6, culmen from the base 10.1 mm; the Bwamba one: wing 77.6, tail 53.7, culmen from base 11.8 mm, weight 25 g.

The stomach of the present specimen contained a sizeable quantity of finely ground or comminuted grayish waxy material mixed with tiny black bits of insect fragments, very similar to that reported in detail from the earlier Bwamba specimen (Friedmann 1968:281-282), which was determined to be scale insect wax, not the paler, more yellowish beeswax usually present in the stomachs of honey-guides of the genus *Indicator*.

The fact that the genus *Melignomon* is intermediate in its characters between *Indicator* and *Prodotiscus*, but somewhat more like the latter, makes it of interest to note that while taking the present specimen out of the mist net, Andrew Williams found it to have a very "hard" body like that of an *Indicator*, not like the softer, "delicate" body of a *Prodotiscus*.

**Indicator maculatus stictithorax* Reichenow. — The Spotted Honey-guide was found to be very common in the forests along the Ouossi River, and 16 males, 17 females, and 1 unsexed specimen were collected, 31 May to 19 June. While most of the birds had no, or only little, gonadal enlargement, 2 taken on 31 May were marked as breeding and 1 other, collected 3 June, had an enlarged ovary. Most of the specimens were caught in mist nets placed near wild bees' nests, baited with bits of becomb. The weights of the birds varied from 43 to 51 g (average 50.6) in males; 40 to 50.5 g (average 40.6) in females. Almost all the birds had beeswax in their stomachs, many also had insect fragments, and one had 2 small seeds as well as insect parts. The condition of the plumage varies from extremely worn to fresh, but no correlation between gonadal state and feather wear could be discerned.

The above series presented an opportunity to compare central African with western Ugandan (Bwamba) birds. The more eastern population averages slightly larger, but the limits of size variation are about the same in our Bwamba and Ouossi River birds (no topotypical *stictithorax*, described from Cameroon, have been available for direct comparison). Thus, males have wing lengths of from 95.5 to 106.5 mm (average 101.5) in 12 Bwamba specimens, 95.0 to 104 mm average (99.9) in 17 Ouossi River birds; females have wing lengths of 95 to 98.8 mm (average 96.4) in 11 Bwamba birds, 92.1 to 100.3 mm (average 90.4) in 16 Ouossi River examples.

A general clinal increase in size occurs in the species as a whole from west to east. Mackworth-Praed and Grant (1970:558) write that nominate *maculatus* (Gambia to Nigeria) have wing lengths of 97 to 103 mm, *stictithorax* 100 to 107 mm. I have found no specimen with wings as long as 110 mm, the maximum for *stictithorax* given by Malbrandt and Maclatchy (1949:275).

According to Chapin (1939:548) typical *maculatus* differs from *stictithorax* in being a little darker on the crown, the cheeks and malar region unstreaked, dark olive, and the abdomen less yellowish. Judging from our large series of *stictithorax* it would seem that the abdominal coloration is too variable to be of much diagnostic value, but all of our 59 birds have streaks on the cheeks and malar region.

Indicator indicator (Sparrrman). — The Greater Honey-guide is represented by 4 adult males, 1 adult female, 3 immature birds of both sexes, taken 1 to 15 June, all with little or no gonadal enlargement, weights 45 to 50 g (average 48) in the adult males, 52 g in the adult female; 45 and 46 g in 2 immature females, 54 g in an immature male. The specimens were taken at the edge of the forest, some of them in mist nets near wild bees' nests; they were in remarkably fresh, unfaded plumage.

Clancey (1970:378) described a race of this honey-guide from southern Mozambique, *I. indicator inquisitor*, said to be characterized by smaller size; wing length of males 105 to 110.5 mm, as against 113 to 120 in males of the nominate subspecies. While the validity of a southeast African race may seem tangential to a study of a series from the Central African Republic, it does affect the present use of a binomial for our specimens. Our males from Ouossi River have wing lengths of from 104 to 107.8 mm (average 106.4), and our comparative material from Kenya have wings 103 to 109.8 mm; in other words all are within the size range given for the race *inquisitor*; one male from the Ivory Coast has a measurement of only 102.5 mm. The wide geographic spread of small *I. indicator* makes one ask whether typical *indicator* may be a large race confined to the Cape Province, an area from which no material has been available for comparison. However, Clancey stated that coastal Kenya birds are equally large and must be considered *I. i. indicator*. Our coastal Kenya adult males (Lamu, Tana River and Sokoke) have wing lengths of from 104.5 to 107.0 mm. The mensural data given by Irwin and Benson (1966:16) for birds from various parts of Zambia are similarly difficult to account for in terms of geographic subspeciation, although in a later paper Clancey (1972:181-182) extended the range of *inquisitor* to include "... the valley of Luangwa, Zambia, and that of the lower Shire R., Malawi, and, perhaps, on the coast of Tanzania and the off-shore islands of Mafia, Zanzibar and Pemba." However, it seems unlikely that this supposed race could also extend to the Central African Republic and even to the Ivory Coast, and until further clarification, it seems better to consider the species monotypic.

Indicator minor riggenbachi Zedlitz. — The Lesser Honey-guide was found to be very common along the Ouossi River in open areas at the edges of the forest; 12 males and 3 females were collected 3 to 18 June; all with little or no gonadal enlargement; weights 27.5 to 34 g (average 30.4) in the males, 27 to 30 g (average 28.3) in the females. Many of the specimens were caught in mist nets near wild bees' nests, and most (11) of them had beeswax as well as insect fragments in their stomachs. This series agrees very closely with many others from extreme western Uganda, and does not show any trend toward the ventral pallor of *I. minor alexanderi*, the race that occurs to the northwest of their area, and still less to the still paler *I. minor senegalensis* with which White (1965:275) has united *alexanderi*.

**Indicator exilis exilis* (Cassin). — The Least Honey-guide must be a very common bird in the forest along the Ouossi River, as in 17 days, 2 to 19 June, the expedition obtained a series of 29 specimens (17 males, 12 adult, 5 immature; and 10 females, 6 adult, 4 immature; and 2 birds of unrecorded sex). As might be expected from the geographic location of the area, the birds are somewhat intermediate between nominate *exilis* and the slightly larger, more eastern, *pachyrhynchus* (Bahr-el-Ghazal province of the Sudan to eastern Zaïre, Uganda and western Kenya), but seem better placed with the former subspecies. Thus, the wing lengths of our 12 adult males vary from 68 to 80.5 mm (average 75.9); 6 adult females 66.2 to 71.2 mm (average 68). Chapin

(1962:41-42) noted wing lengths of 72 to 79.5 mm for male *exilis*, 65 to 70 for females; while for *pachyrhynchus* he gave wing lengths of 75.5 to 84 mm for males, 68 to 76 mm for females. In the Itombwe area of eastern Zaire, Prigogine (1971:101-102) found the two races to be altitudinally distinct. *I. e. exilis* below 1200 m, and *I. e. pachyrhynchus* above 1800 m, a conclusion difficult to accept. In this connection I have reviewed and measured all the specimens in the Los Angeles County Museum collections from the Impenetrable Forest, southwest Uganda, and find them all to be *pachyrhynchus*; they were collected at altitudes of from 4000 to 7500 feet. In the report on the birds of the Impenetrable Forest (Keith, Twomey, Friedmann, and Williams 1969:14) only *I. exilis exilis* is listed and only from 4000 feet. Some of our specimen records from higher elevations were collected too late for inclusion in that paper, and at that time *pachyrhynchus* was considered not different enough from *exilis* to recognize by name. The two races are based, it is true, on only average differences; Mackworth-Praed and Grant (1970:566) also consider them as one subspecies. However, in view of Chapin's long experience with these birds in the field and museum, I am inclined to follow him in keeping the two apart.

The 10 immature examples of our present series are noticeably dusker below than the adults, and lack the black malar stripe and the white loreal streak of the older birds. Identical differences between young and adult birds are also present in a still larger series of specimens from Bwamba and other forests of extreme western Uganda. The young birds average slightly smaller than the adults; their wing length averages 72.5 mm in the males, 67 mm in the females. Of the 12 adult males in our Ouossi River series, none had testes more than slightly enlarged; of the 6 adult females, all but 1 had enlarged ovaries, an anomalous situation.

Many of our specimens were collected in mist nets near wild bees' nests at the edge of the forest, but a few were shot while feeding on fruits well up in small trees. Most of them had beeswax and insect fragments in their stomachs, but 2 of them, both immature, had small fruits as well. This is the first time this Honey-guide (or any of its congeners) has been found to eat small fruits, an unexpected diet for a Honey-guide. In my earlier (1955:227) survey of the feeding habits of this species, I noted that a seed of unknown kind had been found in the gizzard of one specimen, but otherwise the stomach contents were invariably insects and beeswax (and probably honey). The 12 adult males weighed from 16 to 20.5 g (average 18.2), the adult females 12 to 17.5 g (average 15.9); immature males 16 to 18 g (average 17.5); immature female 17 g.

The use of mist nets placed near bees' nests as a method of obtaining specimens of this Honey-guide was well documented by Archer and Glen (1969:1-2) in their work in the Malabigambo Forest, Uganda. They concluded that their success was due to the fact that the birds made periodic visits to all the wild bees' nests known to them. Despite there being a total of over 2500 yards of mist nets used in the month's work in that forest, not a single Honey-guide was netted except in the immediate vicinity of the bees' nests, although

in the Namalala Forest they did catch one in a net "set at random" (but possibly not very far from a bees' nest unknown to the collectors).

The receipt of this fine series, added to the great number of specimens from western Uganda, now in the Los Angeles collections, has caused me to restudy the variation of *I. exilis*. This leaves me with serious doubt as to the identification of one example (LACM #66903) from Ntandi, Bwamba Forest, Uganda, previously published (Friedmann and Williams 1968:18;1971:33) as *I. pumilio*. It now seems that minimal specimens of *exilis* are just as small as *pumilio*, and indeed, can hardly be distinguished from the latter, without careful study. Thus, the Ntandi bird has a bill slightly larger than in *pumilio*, more like *exilis*, to which species it is now identified even though it is actually exceeded by some examples of *pumilio* in its wing length, tail length and body weight. The minute bill of the latter species seems to be its most reliable diagnostic character; to be appreciated, the bills of *exilis* and *pumilio* should be examined with a hand lens, preferably from the underside. Although the specimen from Kakamega Forest, western Kenya, that Williams and I previously (1965:21-22) decided was *I. pumilio*, is not available for restudy, I began to wonder if it too might be a minimal *I. exilis*. However, Prigogine writes me (25 July 1977) that he recently examined it and one other Kakamega specimen in the Nairobi museum, and found them to be *I. pumilio*, of an undescribed subspecies, which, I hope, he will elucidate in his next paper. Zimmerman's report of *pumilio* from the Kakamega Forest (1972:295) was based solely on a sight record.

While collecting the present series, Williams had in mind the possibility of some of them being *I. willcocksii*, as I also had when studying them, but all are *I. exilis*.

**Melichneutes robustus* (Bates). — The Lyre-tailed Honey-guide is still so scarce a bird in museum collections (not, apparently, in nature) that additional specimens are examined with much interest. Two adults, one of each sex, were caught in mist nets set in open forest near a wild bees' nest, and baited with beecomb, 6 and 9 June. The male showed some gonadal enlargement, testes 4×3 mm, the female had a small, inactive ovary. The female was in much worn and faded plumage; the male was not in fresh, but in less abraded, feathering, and was darker above; weight 61.5 g in the male, 49.5 in the female; stomach contents of male "entirely beeswax—weighed 3 g"; of female "insect fragments"; soft parts were recorded as follows: bill dark horn brown, lower base paler; iris orange-brown (male) to dark brown (female); feet dark brownish gray to blackish gray; bare eye skin pinkish brown (male), olive gray (female); wing length 95.8 mm (male), 94 mm (female).

Inasmuch as so little is still known of this Honey-guide it may be well to call attention to a specimen taken more than 12 years ago, in a snare baited with beecomb, in the Mongomo region, Rio Muni (now Spanish Continental Guinea), a record published anonymously (probably by J. Sabater Pi) in a little-consulted popular journal of the Barcelona Zoological Park (Anon. 1963:43). This record has been overlooked by all the ornithological journals, and is the first, and so far, the only, record from that country. The specimen is

now in the American Museum of Natural History (AMNH #802455). While this record did not increase the known range of *Melichneutes*, which was previously reported from Gabon to the south, and from Cameroon to the north, the almost simultaneous report by Beatty (1963:100-101) suddenly extended its range westward by about 1000 miles to Mt. Nimba, at the point where Liberia, Ivory Coast and Guinea come together. The previous westernmost record was in southern Nigeria, but it is probable that the range is not that discontinuous; the species may be expected to "turn up" in the upper Guinean forests of the Ivory Coast, Ghana and Dahomey.

FAMILY PICIDAE

**Campethera nivosa herberti* (Alexander). — The Buff-spotted Woodpecker was found to be common along the Ouossi River and 4 males and 3 females were collected 1 to 18 June, all with little or no gonadal enlargement; weights males 34 to 38 g (average 37); females 34.5 to 38 g (average 36.1).

Campethera caroli (Malherbe). — One male, 4 females, all with small gonads, taken 6 to 17 June; weights: male 60 g; females 53 to 68 g (average 58.6). These specimens agree with a long series from western Uganda in the Los Angeles collections, and would have to be considered *budongoensis* if that race were upheld, as it is by Mackworth-Praed and Grant (1970:571), but the characters of that subspecies do not appear to be constant enough to warrant its recognition.

Dendropicos xantholophus Hargitt. — This woodpecker apparently is less common in the area than either of the *Campethera* species; only a single example was obtained 5 June, a male with small testes; weight 58 g. It was shot in the tree tops, whereas the *Campethera* were taken largely in the mist nets, which may account for their apparent greater numbers and relative abundance.

FAMILY EURYLAEIMIDAE

**Smithornis capensis camarunensis* Sharpe. — Three specimens, 1 saved as a study skin and 2 as skeletons, were collected in mist nets in the forest undergrowth 2 to 13 June; the male preserved as a study skin and a female saved as a skeleton had enlarged gonads; a male (skeleton) showed only slight testicular swelling; weights 26 g in each male, 24 g in the female. The subspecific identification of the study skin is based on the conclusions of Mackworth-Praed and Grant (1970:609), but it agrees very well with a series of *meinertzhageni* from western Uganda, which Mackworth-Praed and Grant consider the same as *medianus*. More extensive series with more complete geographic coverage are needed to settle the matter of races of this bird.

FAMILY PITTIDAE

**Pitta angolensis longipennis* Reichenow. — One male, testes not enlarged, was taken in a mist net 3 feet up in dense undergrowth of mature forest,

5 June, wing 121.5 mm, weight 84 g. The fact that this bird, and also its other African congener, *P. reichenowi*, are captured so seldom, even in mist nets, suggests that they are really scarce and not merely difficult to see.

FAMILY ALAUDIDAE

Mirafra rufocinnamomea tigrina Oustalet. — The Flappet Lark is a bird of the open grasslands, not of the forest; 2 males, 1 with enlarged, the other with small testes, were taken just outside the forest edge 6 and 16 June; weights 27 and 28 g. This race of the Flappet Lark has been collected but seldom; no records from the Central African Republic for the species are indicated in Hall and Moreau (1970:map 6). Meyer de Schauensee (1949:8) listed a specimen of *M. r. zombae* from Oka, which may be referable to *tigrina*. White (1961:20) places *zombae* in the synonymy of *fischeri*, but it seems likely that the name *tigrina* could be applied to a specimen from the Ubangi-Shari region.

Galerida modesta bucolica (Hartlaub). — The Sun Lark was found in the open grasslands at the edge of the forest; 2 males and 1 female, all with small gonads, were taken 6 and 12 June; weights 21.5 and 22 g in the males, 18 g in the female; stomach contents, insect fragments and grass seeds.

FAMILY PYCNONOTIDAE

Pycnonotus virens virens (Cassin). — The Little Greenbul was common in the Ouossi River area; 5 specimens were netted in the forest undergrowth 31 May to 9 June, 3 males with enlarged testes, and 2 females, one with enlarged, the other with slightly enlarged ovary; weights males 23.5, 24 and 24 g; females 21 g.

Pycnonotus curvirostris curvirostris (Cassin). — Fairly common; 3 males and 1 female were netted in the riverine forest undergrowth 2 to 17 June; gonads enlarged in the 3 males, slightly so in the female; weight males 24, 25, 26 g; female 26 g. Only one record from the Central African Republic is indicated in Hall and Moreau (1970:map 68); none in Malbrandt and Maclatchy (1949).

Pycnonotus latirostris latirostris (Strickland). — Two females, 1 with small, 1 with enlarged ovary, were netted in the forest undergrowth 31 May and 10 June; weights 22 and 30 g. Because these birds are fairly small, wing length 72 and 76 mm, they are placed with the nominate race of this Greenbul, in accordance with Chapin's (1953:113) arrangement, although they are not smaller than some of a long series of *eugenia* from Uganda. Chapin admitted that it was "difficult to determine the limits" between the two. In the Central African Republic this species must be restricted to the forested areas in the south along its border with the Republic of the Congo.

**Pycnonotus gracilirostris chagwensis* (van Someren). — One bird of each sex, both with gonads enlarged, shot in a fruiting tree at the forest edge 8 and 15 June; weight 32 g (male), 40 g (female). The map in Mackworth-Præd and Grant (1970:82) seems to anticipate its presence there, but as stated earlier, this is not a definite statement.

**Baeopogon indicator indicator* (van Someren). — One male, testes slightly enlarged, June 19; weight 46 g.

Phyllastrephus scandens orientalis (Hartlaub). — Six specimens, 8 and 9 June, gonads enlarged in 1 male, not enlarged in 2 others and in 3 females; mostly netted in open forest undergrowth; weights males 48 and 50.5 g, females 38, 41, 45 g; all the specimens in worn plumage.

Phyllastrephus albigularis albigularis (Sharpe). — Common; 6 specimens were caught in mist nets in the forest undergrowth 31 May to 10 June; 3 with large, 3 with small gonads; weight males 26 and 28.5 g, females 20 to 24 g (average 22.2). These birds agree in size and coloration with a long series from western Uganda. Ouossi River provides a specimen record locality that fills a large gap in Hall and Moreau's map (1970:map 90).

Bleda syndactyla woosnami Ogilvie-Grant. — Five adults, taken in riverine forest undergrowth 31 May to 7 June; gonads varying from small to large; weights males 48, 49 g; females 41, 48 g. These specimens agree with a long series from western Uganda and do not show any intergradation with *B. syndactyla multicolor*, although the distribution maps in Mackworth-Praed and Grant (1970:57-58) suggest that the latter might be the race to be expected in the southern part of the Central African Republic. Hall and Moreau (1970:map 80) show only one record of this bird in the Central African Republic, where its range must be limited to the southern forests near the border of the Republic of the Congo.

Bleda eximia ugandae van Someren. — The Green-tailed Bristle-bill is represented by 5 adult males, testes large in 4, slightly enlarged in 1, and 1 adult female, ovary slightly enlarged; 31 May to 7 June; weights 42 to 48 g in males (average 44); 36 g in the female.

Nicator chloris (Valenciennes). — Although many recent authors place *Nicator* in the shrike family, I prefer to follow Chapin's arguments (1953:183-185) and keep it among the bulbuls, somewhat aberrant as it may be in that family. It must be common in the Ouossi River forests, where 7 adults were obtained, largely in mist nets in the undergrowth in both open and dense forest, 2 to 19 June; 3 males with enlarged testes, 4 females with small or slightly enlarged ovaries; weight males 50, 54, 58 g; females 40, 41, 43, 43g.

Criniger calurus emini Chapin. — Fairly common; 5 specimens, 3 males and 2 females were taken in mist nets in the riverine forest undergrowth, 3 to 16 June; gonads not enlarged in 3, enlarged in 2 of the birds; weights males 30.5 to 34 g (average 32.1); females 25 and 30 g.

FAMILY LANIIDAE

Malaconotus cruentus adolfifriederici Reichenow. — One male, testes slightly enlarged, was taken in dense forest undergrowth 31 May; weight 79.5 g. The races of this shrike are ill-defined and not too certainly identifiable. However, the small size of the present specimen, wing 107 mm, agrees with one from the Semliki River (Chapin 1954:40), and it is placed with *adolffriederici*. Hall and Moreau (1970:map 112) show no records for *M. cruentus*

from the Central African Republic east of Bangui, and Mackworth-Praed and Grant (1973:460) seem to restrict *adolfifriederici* to the eastern parts of Zaïre and western Uganda, so the present specimen extends the known range of that race a long distance to the northwest.

FAMILY MUSCICAPIDAE

Subfamily Turdinae

**Erythropygia leucosticta collsi* Alexander. — Three adult males, 1 breeding, 1 with enlarged and 1 with small testes; 1 female with an enlarged ovary, were taken in mist nets in heavy forest undergrowth 6 to 12 June; weights males 26, 27, 28 g, female 27 g; stomach contents beetles and a small snail.

Erithacus erythrorhax mabirae Jackson. — A common bird in the Ouossi River forest, but one that is seldom seen except when caught in mist nets; 5 males and 2 females were so captured in dense forest undergrowth 31 May to 4 June, gonads large in 1 male, small or only slightly enlarged in the others; weights males 16.5 to 19 g (average 17.5), females 16.5, 17 g. Judging from the absence of records in Hall and Moreau (1970:map 145) the above are the first specimens collected in the Central African Republic other than in the extreme southwest, near the Cameroon border.

**Cossypha natalensis intensa* Mearns. — Two males, 1 female, all with gonads much enlarged, taken in forest undergrowth 8 to 10 June; weights males 37, 39 g, female 38 g. These extend the known range of this Robin-chat northward to the southern part of the Central African Republic.

**Alethe diademata woosnami* Grant. — The Fire-crest Alethe was found to be common in the Ouossi River forests and its range in the Central African Republic is probably restricted to the forests near the Zaïre border. Between 31 May and 9 June 8 specimens were taken, 4 males with large testes, 1 female with an oviduct egg, 2 with slight ovarian enlargement, and 1 subadult female molting into adult plumage; weights males 32 to 34 g (average 32.6), female adults 32 to 39 g (average 34.7), subadult female 28 g.

**Alethe poliocephala carruthersi* Grant. — Four adult Brown-chested Alethes, two of each sex, the males with large testes, the females varying from small to slightly enlarged ovaries, were netted in the dense forest undergrowth 31 May to 15 June; weights males 30, 32.5 g; females 26, 31 g respectively.

Stizorhina fraseri vulpina Reichenow. — Fairly common in the Ouossi River forests, 1 male and 4 females were taken there 1 to 11 June; gonads enlarged in most of the birds, one female marked "breeding"; weight of male 34 g, females 32, 33.5, 36 and 39.5 g; all had been feeding on small beetles.

Neocossyphus poensis praepectoralis Jackson. — Two males, 1 female, with gonads enlarged in 1, not in the others, were taken in riverine forest undergrowth 31 May to 10 June, and extend the known range of this bird a considerable distance north. In the Central African Republic the species was reported earlier only from the extreme southwest corner, close to the Cameroon border. The males weighed 52 and 53 g, the female 50.5 g.

Subfamily Timaliinae

**Trichastoma albipectus albipectus* (Reichenow). — Common in the forest undergrowth; 4 males and 3 females were taken 1 to 19 June, gonads varying from small to large; weights males 31 to 38 g (average 35.2), females 30 to 36 g (average 32.3); stomach contents beetles and one lepidopteran larva. These specimens extend the known range of the species to the northwest of the records plotted by Hall and Moreau (1970:map 165).

**Trichastoma rufipenne rufipenne* Sharpe. — Apparently less numerous than *T. fulvescens*; 3 males, all with enlarged testes, taken 2 to 5 June, weights 26 to 30 g (average 28), agree with a long series from western Uganda.

Trichastoma fulvescens ugandae (van Someren). — A common species in the forest, 4 adults of each sex were collected 1 to 17 June; gonads varying from not enlarged to large; weights 31 to 38 g (average 34.7) in males; 28 to 30.5 g (average 29) in females.

**Ptyrticus turdinus turdinus* Hartlaub. — Two examples of the Thrush-babbler were taken in the dense undergrowth of the forest 11 and 12 June, one of each sex, both with small gonads; weight male 72.5 g, female 59 g. The male is considerably larger than the female, wing 107.4 as against 95.4 mm; culmen from base 22.9 as against 22.1 mm; the tail of the female too damaged for meaningful comparison. The present specimens help to fill a great geographic gap in the range, as indicated by actual specimen records, in Hall and Moreau (1970:map 168).

Phyllanthus atripennis bohndorffi (Sharpe). — The Capuchin Babbler is a common bird in the forests of the Ouossi River area. Six adults, 3 of each sex were taken between 5 and 16 June (4 netted, 2 shot); all with small or only slightly enlarged gonads; weights males 80, 84, 90 g; females 86, 86 and 94 g respectively. These specimens are all typical *bohndorffi* and show no approach to *haynesi* of northern Cameroon although 1 male has two dark brown feathers among the gray ones on one side of the crown; they agree closely with a series from western Uganda. The Ouossi region adds an intermediate locality of record in the distribution shown for the species in Hall and Moreau (1970:map 175).

Subfamily Sylviinae

Cisticola natalensis strangei (Fraser). — Two males, testes slightly enlarged, were taken at the forest edge 15 and 20 June; weights 23 and 26 g.

Camaropectera brevicaudata tinctoria (Cassin). — Three males, all with large gonads, were netted in the forest undergrowth 4 to 12 June; weights 11, 12 and 12 g.

**Camaropectera superciliaris flavigularis* Reichenow. — One male, testes large, was taken in dense growth at the forest edge 4 June; weight 10 g.

**Camaropectera chloronota toroensis* (Jackson). — Three males, testes slightly or not enlarged, netted in forest undergrowth 1 and 2 June, weights 10.5, 11 and 12 g, constitute a very considerable northwestern extension of the

known range of the species. They agree well with west Ugandan examples and are, accordingly, placed with that race.

**Macrosphenus flavicans hypochondriacus* (Reichenow). — One male with small testes, netted in forest undergrowth 10 June, weight 14 g, extends the previously known range of the race *hypochondriacus* northwestward about 200 miles.

Hyliota flavigaster flavigaster Swainson. — Two adults, one of each sex, male with enlarged testes, female with small ovary, were collected at the edge of the forest 12 and 13 June, foraging in the tree tops with a party of *Parus leucomelas*; weight male 13 g, female 12.5 g. Judging by the distribution shown in Hall and Moreau (1970:map 259) these specimens fill a considerable gap in the recorded range of the species.

Hylia prasina prasina (Cassin). — Apparently common in the Ouossi River area, 6 specimens, 3 of each sex, gonads varying from small to large, were netted in the forest undergrowth 1 to 10 June; weights males 14, 15, 15 g, females 12 g in each case.

Subfamily Muscicapinae

Fraseria cinerascens cinerascens Hartlaub. — This Flycatcher must be common in the Ouossi River forests, as 4 adults of each sex and 1 immature male were taken, chiefly in mist nets in the forest undergrowth, 31 May to 18 June; gonads small in most birds, large in 1 male taken 31 May; weights males 21.5 to 24.5 g (average 23), females 18 to 22 g (average 19.8).

Myioparus plumbeus plumbeus (Hartlaub). — A single male, testes not enlarged, one of a small flock seen at the edge of the forest, was collected 18 June. It is not fully adult, with a brownish wash on the breast and sides of the abdomen; weight 13 g. Hall and Moreau (1970:map 249) show no records for this Flycatcher from the southern part of the Central African Republic.

Myioparus griseigularis griseigularis (Jackson). — Three males, 2 with enlarged testes, 1 with small ones, 2 to 12 June; weights 14 g in each case; plumage somewhat abraded in all. These specimens agree closely with a series from western Uganda. The Ouossi River records add a locality in the middle of a considerable gap in the map in Hall and Moreau (1970:map 249).

**Platysteira castanea castanea* (Fraser). — Two males and 1 female, all with enlarged gonads, were netted in dense forest undergrowth 4 and 9 June; weights males 13 and 14 g, female 16 g.

**Trochocercus nigromitratus* (Reichenow). — One female, with ovary not enlarged, was taken in open undergrowth in riverine forest 6 June; weight 9 g. The distribution of this species in the Central African Republic must be limited to the forested areas of the south, along the border of the Republic of the Congo.

Terpsiphone rufiventer ignea (Reichenow). — Apparently common in the Ouossi River area, but previously reported only from the western part of the Central African Republic; 4 males, all with large testes, 2 females, with little or

no ovarian swelling, 7 to 18 June; weights males 14 to 15.5 g (average 14.9), females 15.5, 16 g. These specimens extend the known range of *ignea* northward a considerable distance, the previously reported limit being the Uelle River, Zaïre. Like the Congo specimens of *ignea*, these birds have the rectrices brownish, only washed with rufous.

FAMILY PARIDAE

Parus leucomelas guineensis Shelley. — One male, testes not enlarged, was taken at the edge of the forest 8 June; weight 20 g; also seen 12 and 13 June.

FAMILY NECTARINIIDAE

Anthreptes longuemarei haussarum Neumann. — One male, 1 female, gonads not enlarged, were taken at the edge of the forest 7 and 13 June; weight male 14 g, female not recorded.

**Anthreptes rectirostris tephrolaema* (Jardine and Fraser). — Five males, gonads varying from small to large, were taken in trees at the forest edge, 12 to 16 June; weights 10 g in 4 cases, 11 g in the other.

Anthreptes collaris somereni Chapin. — One male, testes enlarged, 3 females, ovaries small, were collected in fruiting trees at the forest edge 5 to 17 June; weight of male 10 g, females 8 g each.

**Nectarinia seimundi traylori* Wolters. — One specimen, sex undetermined, was taken in a fruiting tree at the forest edge 15 June.

Nectarinia olivacea cephalis (Bates). — This Sunbird must be common in the Ouossi River area; 8 specimens, 3 males with large testes, 5 females with small to slightly enlarged ovaries, were taken in the riverine forest 31 May to 8 June; weights males 11, 11.5 and 12 g, females 9 g in 1, 10 g in the other 4 individuals.

**Nectarinia cyanolaema octaviae* Amadon. — Two males with large testes were shot in fruiting trees at the forest edge 18 and 20 June; weights 15, 16 g.

Nectarinia superba superba (Shaw). — One male, testes large, was collected in tree tops at the forest edge 17 June; weight 17.5 g.

FAMILY EMBERIZIDAE

Emberiza cabanisi cabanisi (Reichenow). — One female, ovary not enlarged, was taken at the forest edge 31 May; weight 22 g.

FAMILY ESTRILDIDAE

Parmoptila woodhousei woodhousei Cassin. — One male, testes slightly enlarged, was netted in swampy undergrowth of the forest 10 June; weight 9.5 g, and extends the known range of this subspecies eastward about 500 miles along the northern limits of its range. In the Central African Republic it was

known earlier only from the extreme western area, bordering on Cameroon.

**Nigrita bicolor brunnescens* Reichenow. — Two females, 1 with small and 1 with enlarged ovary, were taken near the forest edge 10 and 12 June; weights 13 and 15 g.

**Nigrita canicapilla canicapilla* (Strickland). — Two females, 1 with enlarged, 1 with small ovary, were collected 15 and 19 June at the forest edge; weight 20 g each. The present birds are very slightly paler gray above than a series of *schistacea* from western Uganda, but the two races must meet not far to the east of the Ouossi River area. The birds had been eating small fruits, probably of the trees from which they were collected.

Euschistospiza dybowskii (Oustalet). — One female with small ovary, and 1 bird of undetermined sex (male by plumage), were collected in dense thicket at the forest edge 8 and 20 June; weight of male (?) 13 g, female 12 g; stomach contents grass seeds and insects. These specimens fill a considerable blank in the records shown by Hall and Moreau (1970:map 385).

**Mandingoa nitidula schlegeli* (Sharpe). — One male, testes not enlarged, was netted in forest undergrowth 12 June; weight 11 g.

Pyrenestes ostrinus ostrinus (Vieillot). — The Black-billed Seed-cracker must be common in the Ouossi River area as 6 examples, all with small gonads, were taken in mist nets in the swampy forest undergrowth 2 to 19 June; weights males 21, 21.5 22 g, females 21, 23, 23 g. Mackworth-Praed and Grant (1973:695-696) treat *ostrinus* and *rothschildi* as two sympatric species on the assumption that "it seems very doubtful that large-billed and small-billed birds would interbreed in any one locality . . ." On the other side of the argument, Chapin (1954:493) writes "that birds of differing sizes may mate with each other cannot be doubted" and gives specific instances. It may be that before man began to clear and otherwise intrude into previously uniformly forested areas there may have been separation of the two "species" but the fact that they do cross and that variants of all degrees of intermediate size occur together in many areas indicates that the birds do not "recognize" specific differences. And they are, biologically, the reliable judges. The present 6 birds show both *ostrinus* and *rothschildi* characters in bill size. A similar situation prevails in a long series of specimens from western Uganda.

**Spermophaga ruficapilla ruficapilla* (Shelley). — The Red-headed Blue-bill must be very abundant in the Ouossi River area as 14 specimens, 8 males, all with small or only slightly enlarged testes, and 6 females, all with small ovaries, were taken, largely in mist nets, in the dense forest undergrowth 2 to 12 June; weights 22 to 27 g (average 24.3) in males, 24 to 28 g (average 24.8) in females. The present records extend the known range of the species over a hundred miles to the northwest.

FAMILY PLOCEIDAE

Ploceus nigricollis nigricollis (Vieillot). — One female, ovary slightly enlarged, was collected in a fruiting tree at the forest edge 18 June; weight 31 g.

Ploceus cucullatus bohndorffi Reichenow. — Two males, testes enlarged, were taken at the forest edge 8 and 12 June; weights 41, 47 g.

**Malimbus nitens microrhynchus* Reichenow. — Two females, ovaries not or only slightly enlarged, were netted in riverine forest undergrowth 4 and 15 June; weights 30, 34 g. These birds are small, wings 80 and 82.5 mm, and agree with a series from western Uganda. They extend the known range of *microrhynchus* about 300 miles to the northwest.

Malimbus malimbicus crassirostris Hartert. — Three specimens, all in non-breeding state, were taken 8 to 19 June; weight male 36 g, females 31 and 33 g. These birds are close to *crassirostris* from western Uganda and fill a sizeable gap in the data recorded in Hall and Moreau (1970:map 348).

FAMILY DICRURIDAE

Dicrurus ludwigii sharpei Oustalet. — The Square-tailed Drongo must be fairly common in the Ouossi River forests, as 5 specimens were taken, 3 males with enlarged or slightly enlarged testes, 2 females with small ovaries, 3 to 11 June; weights males 31, 31, 32 g, females 26, 30 g.

**Dicrurus atripennis* Swainson. — One female, ovary slightly enlarged, was netted in open forest undergrowth 14 June; weight 42 g; stomach contents mainly beetles.

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LITERATURE CITED

- ANONYMOUS (probably J. SABATER PI). 1963. El misteriosa "pajaro indicador de cola de lira." Zoo: Revista de Parque Zoologico de Barcelona, no. 2:43.
- ARCHER, A.L. AND R.M. GLEN. 1969. Observations on the behavior of two species of honey-guides, *Indicator variegatus* (Lesson) and *Indicator exilis* (Cassin). Los Angeles County Museum Contr. Sci. no. 160:1-6.
- BEATTY, H.A. 1963. The lyre-tailed honey-guide in the Ivory Coast. Bull. British Ornithologists' Club, 83:100-101.
- CHAPIN, J.P. 1932. The birds of the Belgian Congo. Pt. I. American Museum Nat. Hist. Bull. 65:1-756.
- . 1939. The birds of the Belgian Congo. Pt. II. American Museum Nat. Hist. Bull. 75:1-632.

- _____. 1953. The birds of the Belgian Congo. Pt. III. American Museum Nat. Hist. Bull. 75A:1-821.
- _____. 1954. The birds of the Belgian Congo. Pt. IV. American Museum Nat. Hist. Bull. 75B:1-846.
- _____. 1962. Sibling species of small African honey-guides. Ibis, 104:40-44.
- CLANCEY, P.A. 1970. Miscellaneous taxonomic notes on African birds. XXIX. Durban Museum Novitates 8, pt. 20:375-390.
- _____. 1972. A catalogue of birds of the South African Sub-Region. Supplement no. 2. Durban Museum Novitates 9, pt. 12:163-200.
- FRIEDMANN, H. 1955. The Honey-guides. United States National Museum Bull. 208:1-292.
- _____. 1968. Zenker's Honey-guide. Journal für Ornithologie, 109:276-283.
- _____. 1969. The status and distribution in Uganda of the white-bellied kingfisher, *Alcedo leucogaster leopoldi*. Los Angeles County Mus. Contr. Sci. no. 158:1-6.
- _____. 1970. Phenotypic potential and speciation in *Indicator* and *Prodotiscus*. Ostrich, Supplement, 8:21-26.
- FRIEDMANN, H. AND J.G. WILLIAMS. 1968. Notable records of rare or little-known birds from western Uganda. Revue Zoologique et Botanique Africain, 77, nos. 1-2:11-36.
- _____. 1971. The birds of the lowlands of Bwamba, Toro Province, Uganda. Los Angeles County Mus. Contr. Sci. no. 211:1-70.
- HALL, B.P. AND R.E. MOREAU. 1970. An atlas of speciation in African passerine birds. British Museum (Nat. Hist.): xv+1-423.
- IRWIN, M.P.S. AND C.W. BENSON. 1966. Notes on the birds of Zambia. Pt. II. Arnoldia, 2, no. 37:1-21.
- KEITH, S., A. TWOMEY, H. FRIEDMANN, AND J.G. WILLIAMS. 1969. The avifauna of the Impenetrable Forest, Uganda. American Museum Novitates no. 2389:1-41.
- MACKWORTH-PRAED, C.W. AND C.H.B. GRANT. 1970-1973. Birds of west-central and western Africa. 2 vols. 1-670;1-818.
- MALBRANDT, R. 1952. Faune du Centre Africain Francais (mammiferes et oiseaux). ed. 2. in Encyclopedie biologique. Paris, 15:1-616.
- MALBRANDT, R. AND A.R. MACLATCHY. 1949. Faune L'Equateur Africain Francais, 1. Oiseaux. in Encyclopedie biologique, Paris 35:1-460.
- MEYER de SCHAUENSEE, R. 1949. Results of the Carpenter African Expedition 1947-1948. Notulae Naturae, Academy Natural Sci. Philadelphia, no. 219:1-16.
- MORONY, JOHN J. JR., W.J. BOCK, AND J. FARRAND, JR. 1975. Reference List of the Birds of the World. American Museum Nat. Hist. 1-207.
- PRIGOGINE, A. 1971. Les oiseaux de L'Itombwe et son hinterland. Musee Royal de l'Afrique Centrale,-Tervuren, Annals, ser. in 8° Ser. Zool., no. 185:1-298.
- SCHOUTEDEN, H. 1962. La faune ornithologique des districts de la Mongala et de l'Ubangi. Musee Royal de l'Afrique Centrale,-Tervuren. Documentation Zoologique no. 3:1-144.
- _____. 1963. La faune ornithologique des district de l'Ituri. Musee Royal de l'Afrique Centrale,-Tervuren. Documentation Zoologique no. 5:1-144.
- WHITE, C.M.N. 1965. A revised check-list of African non-passerine birds. Lusaka, Govt. Printer:1-299.
- WILLIAMS, J.G. AND H. FRIEDMANN. 1965. The pygmy honey-guide, *Indicator pumilio* Chapin, in East Africa. Bull. British Ornithologists' Club, 85:21-22.
- ZIMMERMAN, D.A. 1972. The avifauna of the Kakamega Forest, western Kenya, including a bird population study. American Museum Nat. Hist. Bull. 149, art. 3:259-339.

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